

Listing of Claims

1-55. Cancelled

56. (Previously Presented) A computer-implemented method comprising:
selecting a child class from a class hierarchy, wherein
the class hierarchy comprises
the child class, and
a parent class,
the parent class and the child class are associated with one another,
the child class is configured to inherit an attribute of the parent class,
the child class comprises one or more associated attributes,
the one or more associated attributes comprise the attribute,
the one or more associated attributes are configured to describe an item,
the selecting the child class is based on the one or more associated attributes,
the selecting the child class is performed such that each of the one or more
associated attributes has a non-null value to describe the item,
the attribute has a first domain associated with the parent class and a second
domain associated with the child class, and
the second domain is more restrictive than the first domain;
associating the item with the child class, wherein
the attribute describes one or more members of the child class,
the one or more associated attributes are necessary to describe the item, and
the one or more associated attributes are associated with the child class in the
class hierarchy;
storing a first record associating
the item, and
the child class; and
storing a second record associating the item with
the attribute, and
a value of the attribute.

57. (Cancelled)
58. (Previously Presented) The computer-implemented method of Claim 56, wherein the one or more associated attributes further comprise an additional set of attributes not inherited from the parent class.
59. (Cancelled)
60. (Previously Presented) The computer-implemented method of Claim 56, wherein said storing the first record is to a first memory structure, and said storing the second record is to a second memory structure.
61. (Previously Presented) The computer-implemented method of Claim 60 wherein the first and second memory structures are distinct from one another.
62. (Previously Presented) The computer-implemented method of Claim 60 wherein the first and second memory structures are tables in a database.
63. (Previously Presented) The computer-implemented method of Claim 56 wherein the one or more associated attributes are metadata of the child class.
64. (Previously Presented) An apparatus comprising:
means for selecting a child class from a class hierarchy, wherein
the class hierarchy comprises
the child class, and
a parent class,
the parent class and the child class are associated with one another,
the child class is configured to inherit an attribute of the parent class,
the child class comprises one or more associated attributes,
the one or more associated attributes comprise the attribute,
the one or more associated attributes are configured to describe an item,
the means for selecting the child class is based on the one or more associated attributes,

the means for selecting the child class is configured such that each of the one or more associated attributes has a non-null value to describe the item, the attribute has a first domain associated with the parent class and a second domain associated with the child class, and the second domain is more restrictive than the first domain; means for associating the item with the child class, wherein the attribute describes one or more members of the child class, the one or more associated attributes are necessary to describe the item, and the one or more associated attributes are associated with the child class in the class hierarchy; means for storing a first record associating the item, and the child class; and means for storing a second record associating the item with the attribute, and a value of the attribute.

65. (Cancelled)

66. (Previously Presented) The apparatus of Claim 64, wherein the one or more associated attributes further comprise an additional set of attributes not inherited from the parent class.

67. (Cancelled)

68. (Previously Presented) The apparatus of Claim 64 further comprising: a first and a second memory structure, wherein said means for storing the first record performs said storing to the first memory structure, and said means for storing the second record performs said storing to the second memory structure.

69. (Previously Presented) The apparatus of Claim 68 wherein the first and second memory structures are distinct from one another.

70. (Previously Presented) The apparatus of Claim 68 wherein the first and second memory structures are tables in a database.

71. (Previously Presented) The apparatus of Claim 64 wherein the one or more associated attributes are metadata of the child class.

72. (Previously Presented) A system comprising:
a processor;
a memory, coupled to the processor, storing instructions executable on the processor to select a child class from a class hierarchy, wherein
 the class hierarchy comprises
 the child class, and
 a parent class,
the parent class and the child class are associated with one another,
the child class is configured to inherit an attribute of the parent class,
the child class comprises one or more associated attributes,
the one or more associated attributes comprise the attribute,
the one or more associated attributes are configured to describe an item,
the selecting the child class is based on the one or more associated attributes,
the selecting the child class is performed such that each of the one or more
 associated attributes has a non-null value to describe the item,
the attribute has a first domain associated with the parent class and a second
 domain associated with the child class, and
the second domain is more restrictive than the first domain;
associate the item with the child class, wherein
 the attribute describes one or more members of the child class,
the one or more associated attributes are necessary to describe the item, and
the one or more associated attributes are associated with the child class in the
 class hierarchy;

store a first record associating
the item, and
the child class; and
store a second record associating the item with
the attribute, and
a value of the attribute.

73. (Cancelled)

74. (Previously Presented) The system of Claim 72, wherein the one or more associated attributes further comprise an additional set of attributes not inherited from the parent class.

75. (Cancelled)

76. (Previously Presented) The system of Claim 72 further comprising:
a first and a second memory structure;
the instructions to store the first record perform the storing to the first memory structure,
and
the instructions to store the second record perform the storing to the second memory structure.

77. (Previously Presented) The system of Claim 76 wherein the first and second memory structures are distinct from one another.

78. (Previously Presented) The system of Claim 76 wherein the first and second memory structures are tables in a database.

79. (Previously Presented) The system of Claim 72 wherein the one or more associated attributes are metadata of the child class.

80. (Previously Presented) A computer-readable storage medium comprising:
a first set of instructions, executable on the processor, configured to select a child class
from a class hierarchy, wherein
the class hierarchy comprises
the child class, and
a parent class,
the parent class and the child class are associated with one another,
the child class is configured to inherit an attribute of the parent class,
the child class comprises one or more associated attributes,
the one or more associated attributes comprise the attribute,
the one or more associated attributes are configured to describe an item,
the selecting the child class is based on the one or more associated attributes,
the selecting the child class is performed such that each of the one or more
associated attributes has a non-null value to describe the item,
the attribute has a first domain associated with the parent class and a second
domain associated with the child class, and
the second domain is more restrictive than the first domain;
a second set of instructions, executable on the processor, configured to associate the item
with the child class, wherein
the attribute describes one or more members of the child class,
the one or more associated attributes are necessary to describe the item, and
the one or more associated attributes are associated with the child class in the
class hierarchy;
a third set of instructions, executable on the processor, configured to store a first record
associating
the item, and
the child class; and
a fourth set of instructions, executable on the processor, configured to store a second
record associating the item with
the attribute, and
a value of the attribute.

81. (Cancelled)

82. (Previously Presented) The computer-readable storage medium of Claim 80, wherein the one or more associated attributes further comprise an additional set of attributes not inherited from the parent class.

83. (Cancelled)

84. (Previously Presented) The computer-readable storage medium of Claim 80, wherein the third set of instructions is further configured to store the first record to a first memory structure, and the fourth set of instructions is further configured to store the second record to a second memory structure.

85. (Previously Presented) The computer-readable storage medium of Claim 84 wherein the first and second memory structures are distinct from one another.

86. (Previously Presented) The computer-readable storage medium of Claim 84 wherein the first and second memory structures are tables in a database.

87. (Previously Presented) The computer-readable storage medium of Claim 80 wherein the one or more associated attributes are metadata of the child class.

88. (Previously Presented) The method of Claim 56, wherein the class hierarchy describes vehicles.